

Plaster Mold Making of Reading Glass Holders, Day 1 at Laguna Clay Company

Otis Faculty Development Grant, March 18, 2010. This technique can be used for bowls, plates, and in this case reading glass holder.

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Mark parting line with L ruler.

The piece will be casted solid with slip and the edge will be on the parting line. Little clean up.



Prototype is attached to mason board with WC5 with Sand because it is sticky. Sticky clay adheres well to the prototype and the mason board.

A coil was attached and smoothed out with plaster tool. The result is coil is flattened, prototype is stuck on the mason board.



50% H2O and 50% plastilube applied with a brush, then go back in with a knife to make sure it is stick on along the parting line.

Only one coat of the H2O/plastilube applied. Sponge off plastilube/H2O mixture with a sponge and spray on Mann Release Ease Release 2300 used for rubber molds. Can buy at Laguna.



Plaster boards are attached with clamps,plastlube/H2O mixture is applied underneath the coils of clay to prevent plaster from escaping.

Everywhere plaster escape, you must dam it up. The WC5 with sand is sticky and adheres exceptionally well.



Spray Mann Release Ease Release 2300 used for rubber molds.

This additional step using the release is a trick, worthy of noting because it really releases well.



On the side you are working place clamps downward.

Note how plastic bucket in back is filled with plastilube. The table is made of steel, sturdy, and flat. Mason board is flat. Boards are placed about $1\frac{1}{2}$ " around piece.



USGS Pottery Plaster #1 is weighed, water is also weighed.

In this case, 5lb H₂O to 7lb plaster. He added a little more water to 5.11 to make it a little thinner. Plaster is mixed for 2 minutes. No slaking if you use a mixer. If by hand, you must slake. Use standard formula of plaster to water. 70/30



Pouring the plaster.

When pouring the plaster, pour in the same place and the stable, flat table will work to even out plaster. Take a brush and poke along prototype to get the bubbles to raise to the top. This trick using a brush is key to success.



Mold is flipped over after about 20 minutes. Plaster is still cool. With a knife clean up edges, paying attention to parting line.

Here the craftsmanship and pride in work is demonstrated. Plaster is still cool and soft. Key holes are made. 2 keyholes are together to indicate the direction of the corner. The entire process is repeated BUT straight plastilube is applied to the plaster and prototype. Be sure to avoid any plastilube INSIDE THE PLASTER MOLD, or you will need to sand it off, as the plaster will not pull H₂O out of the slip.

Apply straight plastilube 100% with brush, wipe off with sponge inside a towel to buff, spray Ease Release. NOTE: applied vertically to prevent absorbing of release or lube inside the plaster mold. Notice double keys.





Boards and clamps are removed. The entire process is repeated for the 2nd pour.
Edges are sureformed off. Plaster is still cool .

Releasing the prototype using air compressor. Then metal anvil with metal hammer creates vibration and piece pops out. Magic!



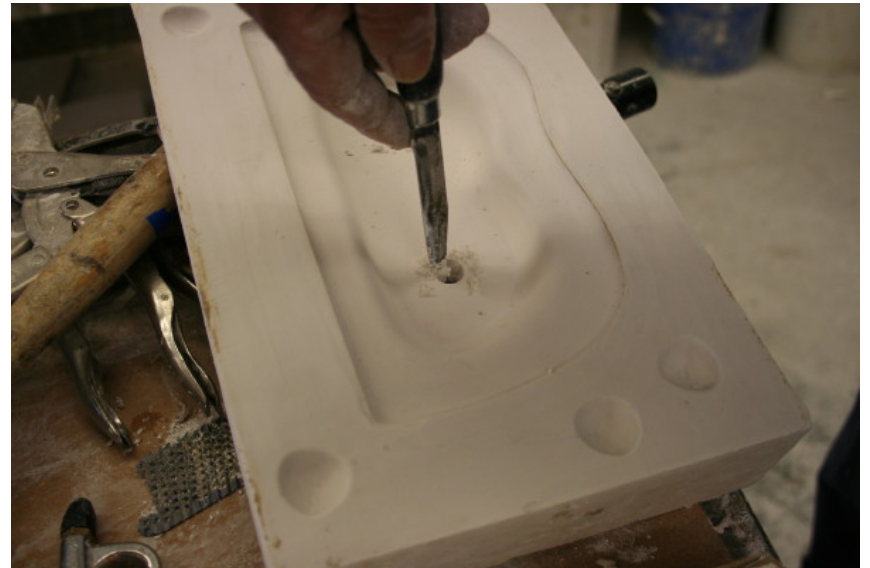


Remove bits of soap scraped with a knife then using 400 wet and dry sandpaper.
Key to the entire process is removing any soap residue.

Creating 2 Pour Holes

Drill 2 holes.

Open up holes with knife from both sides beveling. When slip poured, it will be a solid piece of slip, staying in mold about 2.5 hours. Breaking off slip from pour holes, break it off or remove then sand.



Carving out the Spare

Mark spare well.

Carve out with knife the opening in a funnel shape. Then go back in and carve out using a large trimming tool.





Enlarge pour spout from inside the mold using plaster knife.

Central in thinking is to think how the slip will flow into the mold.



Final clean up with wet and dry sandpaper.